

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows.

On page 3, kindly replace paragraph [0010] with the following amended paragraph.

[0010] In order to attain the above object, according to the present invention, there is provided a catheter that includes an observation portion used for observation of the inside of an organism, an observation lumen in which said observation portion is disposed and which extends in the direction of insertion into said organism, a first guide wire lumen having a distal end and a proximal end, said first guide wire lumen is disposed substantially in parallel to said observation lumen and said proximal end of said first guide wire lumen is disposed on the distal end side in said insertion direction in relation to said observation portion and through which a guide wire is passed, and a second guide wire lumen having a distal end and a proximal end, said second guide wire lumen is disposed on an extension line of said first guide wire lumen and said distal end of said second guide wire lumen is disposed on the proximal end side in said insertion direction in relation to said observation portion and through which said guide wire is passed.

On page 6, kindly replace paragraph [0035] with the following amended paragraph.

[0035] The sheath distal end portion 21 and the sheath main body portion 22 are provided with ~~imaging core lumens (observation lumens)~~ observation lumens 23 and 24, which are in communication with each other. The ~~imaging core~~

observation lumens 23 and 24 are hollow passages formed in the sheath 2. The lumens 23 and 24 are formed over the range from the sheath main body portion 22 to the sheath distal end portion 21.

On page 6, kindly replace paragraph [0036] with the following amended paragraph.

[0036] An imaging core 40 is disposed inside the ~~imaging core~~ observation lumens 23 and 24. The imaging core (~~observation portion; ultrasonic detector~~) 40 includes a transducer unit (observation portion; ultrasonic detector) 41 for transmitting and receiving an ultrasound toward and from a tissue in a body cavity, a drive shaft 42, which is fitted with the transducer unit 41 at its distal end and which transmits a rotational force, and a rotation stabilizing coil 43 attached to the transducer unit 41.

Kindly replace paragraph [0039] on page 7 with the following amended paragraph.

[0039] The drive shaft 42 is flexible. Further, the ~~shaft~~ shaft 42 is capable of transmitting a rotational force generated at the hub 3 to the transducer unit 41. For example, the drive shaft 42 has a fixed outside diameter and is constituted of a tubular body in the form of a multilayer coil such as a trilayer coil in which the winding direction is alternately changed in the manner of left, right, and left. The drive shaft 42 transmits the rotational force, whereby the transducer unit 41 is rotated with the extension direction of the ~~imaging core~~ observation lumen 23 as an axis, making it possible to observe a diseased part in a body cavity such as a blood vessel

and a vas in a 360-degree mode. Besides, a signal cable for transmitting a signal detected at the transducer unit 41 to the hub 3 is passed through the inside of the drive shaft 42.

Kindly replace paragraph [0041] on page 8 with the following amended paragraph.

[0041] In addition, the ~~imaging core~~ observation lumens 23 and 24 not only incorporate the imaging core 40 therein but also play the role of a passage for an ultrasound transfer liquid, which is injected through a port 31 provided at the hub 3. The ultrasound transfer liquid supplied via the port 31 flows through the ~~imaging core~~ observation lumens 23 and 24 to the sheath distal end portion 21, i.e., it flows to fill up the portion ranging from the proximal end side to the distal end side of the sheath 21.

Kindly replace paragraph [0050] on page 10 with the following amended paragraph.

[0050] Incidentally, by operating the hub 3, it is possible to move the transducer unit 41 forward (toward the distal end side) and backward (toward the proximal end side) in the ~~imaging core~~ observation lumen 23 via the drive shaft 42, thereby observing the inside of an organism over a wide range. In this case, if the first guide wire lumen 27 and the second guide wire lumen 28 are spaced from each other by a distance corresponding to the range of forward and backward movement of the transducer unit 41 for observation, the transmission and reception of an ultrasound will not be prevented.

Kindly replace paragraph [0051] on page 10 with the following amended paragraph.

[0051] Besides, the guide wire lumen 26 is provided not coaxially with the ~~imaging-core~~ observation lumen 23 but substantially in parallel to and separately from the ~~imaging-core~~ observation lumen 23. Therefore, since the guide wire 25 and the imaging core 40 do not pass through the same lumen, the guide wire 25 can smoothly pass through the guide wire lumen 26 without being curved.

Kindly replace paragraph [0059] on page 12 with the following amended paragraph.

[0059] As shown in Figs. 3 and 4, the sheath main body portion 22 includes a resin tube 221 as an outside wall, a metallic tube 222 on the inside thereof, and a resin tube 211 further on the inside thereof, which are all fixed. The outside wall of the sheath distal end portion 21 is formed as one body with the same resin tube 211 as that extending from the sheath main body portion 22; in addition, the sheath distal end portion 21 is provided with the ~~imaging-core~~ observation lumen 23 constituting a passage similar to the ~~imaging-core~~ observation lumen 24 formed ranging from the sheath main body portion 22, and, further, with the guide wire lumen 26 for passing the guide wire 25 therethrough.

Kindly amend paragraph [0065] on page 13 with the following amended paragraph.

[0065] In a first method of producing the sheath distal end portion 21, first, as shown on the left side in Fig. 5, a monolayer tube 26a for constituting the guide

wire lumen 26 and a monolayer tube 23a for constituting the ~~imaging-core~~ observation lumen 23 are prepared. Then, as shown on the right side in Fig. 5, parts of the outer peripheries of the monolayer tube 26a and the monolayer tube 23a are adhered to each other, whereby the guide wire lumen 26 and the ~~imaging-core~~ observation lumen 23 substantially parallel to each other can be obtained.

Kindly amend paragraph [0066] beginning on page 13 and ending on page 14 with the following amended paragraph.

[0066] Here, as shown in Fig. 6, instead of the monolayer tube 26a and the monolayer tube 23a, a multilayer tube 26b and a multilayer tube 23b may be adhered to each other. In the case of using the multilayer tubes 26b and 23b, also, in the same manner as in the case shown in Fig. 5, parts of the outer peripheries of the multilayer tubes 26b and 23b are adhered to each other, whereby the guide wire lumen 26 and the ~~imaging-core~~ observation lumen 23 substantially parallel to each other can be obtained.

Kindly amend paragraph [0067] on page 14 with the following amended paragraph.

[0067] In a second method of producing the sheath distal end portion 21, as shown in Fig. 7, a tube 70 having a diametral size sufficient for forming the guide wire lumen 26 and the ~~imaging-core~~ observation lumen 23 therein is prepared. Then, substantially parallel passages 26c and 23c are formed in the tube 70, whereby the guide wire lumen 26 and the ~~imaging-core~~ observation lumen 23 are made to be substantially parallel to each other.

Kindly amend paragraph [0068] on page 14 with the following amended paragraph.

[0068] Here, as shown in Fig. 8, by forming two substantially parallel passages in the tube 70 and fitting multilayer tubes 26d and 23d in the passages, also, it is possible to provide the sheath distal end portion 21 with the guide wire lumen 26 and the ~~imaging-core~~ observation lumen 23 substantially parallel to each other.

Kindly replace paragraph [0069] on page 14 with the following amended paragraph.

[0069] Since the sheath distal end portion 21 is thus formed so that the guide wire lumen 26 and the ~~imaging-core~~ observation lumen 23 are substantially parallel to each other, the guide wire 25 and the imaging core 40 will not pass coaxially, so that the guide wire 25 can be smoothly slidden without bending.